INTERNATIONAL SEARCH REPORT

Internal Application No

PCT/JP2004/011021 A. CLASSIFICATION OF SUBJECT MATTER
1PC 7 H01M4/02 H01M4/08 H01M6/18 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 H01M Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, COMPENDEX C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ' Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. 1-4, X US 6 375 885 B1 (LEDDY JOHNA ET AL) 23 April 2002 (2002-04-23) 9-11,14, 15,31, 36 - 43column 24, line 46 - column 25, line 42 X EP 0 858 120 A (MITSUBISHI DENKI KABUSHIKI 1-7,9, KAISHA) 12 August 1998 (1998-08-12) 11,13, 14,31, 32, 34-40,42 page 7, line 16 - line 40 A US 2002/018930 A1 (HAMANO KOUJI ET AL) 1-43 14 February 2002 (2002-02-14) the whole document -/--X Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents : 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the *A* document defining the general state of the art which is not considered to be of particular relevance invention *E* earlier document but published on or after the international *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the set. O document referring to an oral disclosure, use, exhibition or 'P' document published prior to the International filing date but later than the priority date claimed in the art. "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 8 March 2005 17/03/2005 Name and mailing address of the ISA **Authorized officer** European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016

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